

Amendments to the Specification

Please replace the title with the following:

INTELLIGENT PCI BRIDGING CONSISTING OF PREFETCHING DATA
BASED UPON DESCRIPTOR DATA

Please replace the paragraph beginning on page 4, line 24, with the following:

When the descriptor blocks are read from system memory and pass through the ridge, the bridge would transmit them to the expansion device. In addition, the bridge parses the descriptor to locate the size of the packet to be transmitted, referred to here as the packet length or the transmit size, the location of the packet data, or the address of the data to be operated upon by the device will be referred to here as the descriptor data. The bridge then stores the descriptor data in a table or other local memory 146 on the bridge.

Please replace the paragraph beginning on page 5, line 13, with the following:

For example, assume the packet length is 128 bytes and assume the device can only read 32 bytes at a time, which corresponds to "burst length" in PCI specification. When the device makes the request to read the first 32 bytes, the bridge can prefetch the entire 128 bytes. The bridge knows from the hash table the complete size of the packet. Requests for the remaining 3 sets of ~~32 bytes~~ 32 bytes of the packet from the device can be delivered by the bridge without going to the system memory as it as already prefetched the complete packet of 128 bytes.

Please replace the paragraph beginning on page 5, line 20, with the following:

The bridge could start prefetching before the first request, but this scheme will be a little more difficult to manage and the bridge will have to be more intelligent. Both schemes are possible and are included in the ~~scope of this invention~~ scope of this invention.